

Internal Memo

To Lead Service Center Technician

From James Harrison

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Subject Additions To KayPro Product Line

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Recently, KayPro has made additions/modification to their existing product line. We are currently servicing the KayPro 2, 4, and 10 models in the service centers. We will be servicing a modified version of the KayPro 2, 4, and 10. The additions to the product line are the KayPro Robie, 2X, and 4X.

All the new/modified models use a universal processor board. Particular models are identified by the addition or changing of chips. Different models are established by chip configuration ie., slots U7, U12, U18, U19, U27, U28, U31, U35, U37, and U72 are all empty on the processor board for the upgraded Kaypro 2 configuration and are all populated for the upgraded KayPro 4 configuration. The upgraded KayPro 10 model will have all slots populated and a different PROM chip in slot U34. Eventhough the processor board is a universal board, each of them have a different KayPro part number.

The original KayPro 2, the upgraded KayPro 2, and the 2X use the 110N133 keyboard, and the original model 4, upgraded 4, 10, Robie, and 4X use the 110N132 keyboard.

KayPro 2 (upgraded)

The upgraded KayPro 2 differs from the original KayPro 2 in that the upgraded model has a different processor board (KayPro part number 2134). In slot U34 on the processor boards there will be a PROM number 81-292. The video section is the same as used in the KayPro 10. There is a different internal harness and **Half High Single Sided Double Density Disk Drives** are used. The type of disk drives used in the upgraded KayPro 2 are TEC-FB501 (KayPro part number 1252C). The only difference in the outward physical apperance is the addition of the **Half High Disk Drives**.

KayPro 4 (upgraded)

The upgraded KayPro 4 differs from the original KayPro 4 in that it has a different processor board (KayPro part number 1569 with PROM 81-292 in slot U34 and a lythium battery on the right side of the board), and uses **Half High, Double Sided, Double Density, Disk Drives**. There are several drives which can be used in the upgraded KayPro 4, Shugart SA-455 (KayPro part number 1369S/82P80905), Epson SD-521 (KayPro part number 1369E), and TEC FB-503 (KayPro part number 1369C). The video section is the same as used in the KayPro 10. The internal harness is new and a fan like the one used in the model 10 has been added.

Upgraded KayPro 10

The upgraded KayPro 10 differs from the original KayPro 10 in that the upgraded model has a different processor board with PROM 81-302C in slot U34 (KayPro part number 1575). The upgraded model can be identified by the location of the telephone and keyboard jacks. On the original 10 model both the telephone and keyboard jacks are located at the right rear of the processor board, viewed from the rear of the unit. On the upgraded KayPro 10 the telephone and keyboard jacks are located on opposite sides of the processor board. The upgraded version of the KayPro 10 is equipped with a **Half High Rigid** as opposed to the original 10, which is equipped with a **Full Height Rigid Disk Drive**. Additionally the upgraded version can be equipped with any one of the **Floppy Disk Drives** used on the KayPro 4 (upgraded version).

KayPro 2X

The KayPro 2X is an upgraded KayPro 2 equipped with **Double Sided, Double Density Drives** used in the upgraded KayPro 4.

KayPro Robie

The KayPro Robie uses a different processor board (KayPro part number 2087). The video section and keyboard is the same as used in the KayPro 10. The Robie uses **Drive TEC High Density Disk Drives** (KayPro part number 1876), and a different internal harness # 1895.

KayPro 4X

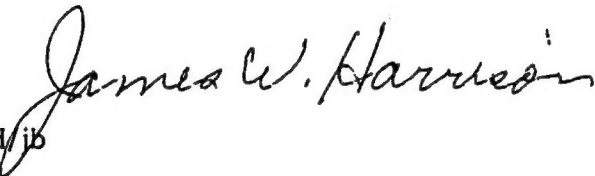
The KayPro 4X is the KayPro Robie in a **upgraded KayPro 4 case**. The reasons for installing the Robie in the KayPro 4 case are cosmetics.

The upgraded KayPro systems are supplied with **MicroPro** software. The earlier versions use the Perfect line of software. New diagnostics will be available for the new/upgraded products.

If you have an upgraded KayPro 2, 2X or 4 with **Toshiba or HI TECH drives**, which KayPro no longer uses, and one or both drives fail under warranty, replace both drives with Shugart, Epson or TEC drives, which ever is available. KayPro will accept both drives as warranty repair.

If the unit is out of warranty, replace the defective drive with any available drive. All double sided double density drives use the same interface and will work together. Replacement of the second good drive for cosmetic reasons will be at customers expense.

If you have any technical questions concerning the new and upgraded models of KayPro equipment, please contact the Hot-Line in Dallas.


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Zone Managers, Service Centers